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Part 1 Overview of the CIM Assessment Process

Introduction

The purpose of the Certificate of Initial Mastery is to provide a set of assessments that high school students can use to demonstrate their mastery of academic and applied learning skills that are essential for their academic expertise and career development. The CIM is awarded to high school students who complete the requirements specified in this manual. This certification will serve as evidence to postsecondary institutions and employers that the student has met or exceeded every standard required by the CIM. For this reason, earning the CIM is important for both college-bound and non-college-bound students.

This manual:

- Explains the CIM assessment process

- Provides information about the assessment administration

- Provides specific instructions and rubrics for the Capstone Project

Other materials will be distributed to you when you are ready to begin various components of the program.

Importance of the CIM

Academic achievement in areas such as mathematics and English language arts, the ability to apply academic learning, and the possession of important work habits, are keys to the success of young adults. This applies both to students who are planning to continue their education after high school, or who are entering the workforce directly. The Certificate of Initial Mastery provides an opportunity for young adults to demonstrate their mastery of critical thinking skills and be recognized for their performance.

Overview of the Assessments

The Rhode Island CIM has four basic components, each of which has multiple elements. They are:

English Language Arts This area is based on the New Standards English/Language Arts standards and the RI Grade Span Expectations, which contain standards in reading, writing, and oral comprehension. This component is assessed in three different ways:

- Scores on New Standards Reference Exam

- Two on-demand performance tasks

- One extended performance task

Mathematics This area is based on the New Standards Mathematics standards and the RI Grade Span Expectations. This component is also assessed in three different ways:

- Scores on New Standards Reference Exam

- Two on-demand performance tasks

- One extended performance task

Work Habits This component is assessed through a combination of ratings of students. New Standards Applied Learning Standards 1 through 4 are assessed through the Capstone Project. Work habits covering Applied Learning Standard 5 are assessed by three adults according to prescribed rating system.

Capstone Project Complete details of this project are found in the Capstone Project Guidebook section of this manual.

When students have completed all the assessments described above, they are assembled into a *CIM Portfolio*. The CIM Portfolio, which may eventually have an electronic form, can be used to display skills and knowledge to employers and educators. A completed portfolio contains:

1. New Standards Reference Examination results in English/Language Arts and Mathematics,

2. On-Demand and Extended tasks and copies of student work that meets standard in English/Language Arts and Mathematics,

3. Work habit evaluation forms for teamwork and responsibility, and

4. Evidence of a completed Capstone Project with presentation evaluation.

Awarding the CIM

*   Students take the New Standards Reference Exams as eleventh graders and will have opportunities to retake these exams if necessary. [Each student must meet standard on the New Standards Reference Exam in both Mathematics and ELA.]

*   Each student must meet standard on two On-demand Tasks and one Extended Task in both English/Language Arts and in mathematics. Students will have multiple opportunities to take these tasks.

*   Students must meet standard on all four components of the CIM (English Language Arts, Mathematics, Student Work Habits, Capstone Project/Applied Learning).

Responsibilities of Students

Students are responsible for completing each portion of the CIM assessment process on schedule and in the manner requested. Directions for each assessment component are found in subsequent chapters.

While the student is encouraged to seek consultation, the work included in the student's portfolio is his/her own.

Rights of Students

Students participating in the CIM assessment process have several rights.

Re-testing Students who do not meet standard on the ELA or Mathematics assessments have the right to be re-tested in order to meet standard.

Appeal of Scores from ELA and Mathematics Tasks or Capstone Project Students have the right to appeal any score that does not meet standard. The first appeal takes place at the school level, and if necessary, subsequently at the Rhode Island Skills Commission. The student should begin the appeal process with his or her CIM advisor or English or Mathematics teacher. The CIM advisor should consider the appeal and decide whether to endorse it or not, based on the merits of the student's information and argument. The advisor or teacher must tell the student whether or not his/her appeal will be endorsed and the basis for that decision. If the advisor or teacher endorses the appeal, he or she prepares a description of the basis for the appeal and gives this to the CIM Practitioner, who takes it to a consortium-wide meeting of CIM Practitioners, where a final decision is made. If a student's appeal is not endorsed by his/her CIM advisor or teacher, he/she may still appeal directly to the CIM Practitioner in written form. An unendorsed appeal has less chance of approval by the CIM Practitioners.

Part 2 English/Language Arts and Mathematics Tasks

Why Include On-Demand and Extended Tasks?

On-demand and extended tasks are important components of the CIM. This is because they both exercise skills that are essential in both business and higher education. Mastering these skills is a requirement for success in both these environments.

On-demand tasks simulate one kind of demand for rapid, high quality production. In business, people are often asked to write memos, make estimates, assemble information, or complete other jobs quickly and accurately. Those who fulfill these requests are typically expected to work without outside help. In these situations, success depends on understanding the request and quickly and thoroughly fulfilling the request. In education, similar demands are made in the form of quizzes or spontaneous requests for information. This is why on-demand tasks are part of the CIM portfolio.

It is also the case that people are expected to work on more extended tasks in both business and higher education. In the business world, people are called upon to develop estimates, create presentations and complete other tasks that require a range of skills over the course of a few days or weeks. These tasks require more extended effort, but also allow a more reflective approach and execution due to the extended scope of time they give.

For these reasons, students are required to meet standard on two on-demand tasks in both English/Language Arts and Mathematics. They are also required to meet standard on one extended task in both English/Language Arts and Mathematics.

English/Language Arts On-demand Tasks

2004-2005

On-demand tasks are designed to be completed in approximately 90 minutes, with additional time (15 minutes) to finish, if needed. Tasks use time in different ways, so you should read the instructions for each task carefully before beginning your work. The rubric that is used to score your work is included in each task and you should read this carefully before beginning your work.

If you have Individual Education Plan (an IEP), 504, or PLP, you should take these tasks under conditions modified to conform to those plans. Be sure your teacher knows this before you begin work.

English/Language Arts On-demand Tasks (Students must meet or exceed standard on two tasks to satisfy the CIM requirements for ELA on-demand tasks)

On-demand tasks are designed to be completed within the designated time indicated in the task booklet; this is usually 80 to 120 minutes, depending on the nature of the task.   The rubric that is used to score your work is included in each task and you should read this carefully before beginning your work.

If you have Individual Education Plan (an IEP), you should take these tasks under conditions modified to conform to those plans: be sure your teacher knows this before you begin work.

On-demand Task #1a — Mother to Son – Response to Literature - Poetry

This task addresses English/Language Arts Reading Standard E2b (produces a response to literature), E5a (responds to poetry using interpretive, critical, and evaluative processes), and E4a (independently and habitually demonstrates an understanding of the rules of the English language in written work)

On-demand Task #1b— When I Think About Myself– Response to Literature - Poetry

This task addresses English/Language Arts Reading Standard E2b (produces a response to literature), E5a (responds to poetry using interpretive, critical, and evaluative processes), and E4a (independently and habitually demonstrates an understanding of the rules of the English language in written work)

On-demand Task #2 — Eleven – Response to Literature - Prose

This task addresses English/Language Arts Reading Standard E2b (produces a response to literature); E5a (responds to fiction using interpretive, critical, and evaluative processes); and E4a (independently and habitually demonstrates an understanding of the rules of the English language in written work)

On-demand Task #3 — My Memorable Meeting

This task addresses English/Language Arts Reading Standard 2c (produces a fictional or autobiographical narrative account) and Conventions, Grammar, and Usage Standard 4a (habitually demonstrates an understanding of the rules of the English language)

On-demand Task #4 — Positive Failure

This task addresses English/Language Arts Reading Standard E2f (produces a reflective essay) and Conventions, Grammar, and Usage Standard E4a (habitually demonstrates an understanding of the rules of the English language)

On-demand Task #5— Driving Requirements

This task addresses English/Language Arts Reading Standard E2e (produces a persuasive essay) and Conventions, Grammar, and Usage Standard E4a (habitually demonstrates an understanding of the rules of the English language)

On-demand Task #6 — I have a Dream

This task addresses English/ Language Arts E6a (the student critiques public documents), and Conventions, Grammar, and Usage Standard E4a (habitually demonstrates an understanding of the rules of the English language)

On-demand Task #8 — Voices of History

This task addresses English/Language Arts Writing Standard E3c (prepares and delivers an individual presentation) and E3e (listens to and analyzes a public speaking performance)

English/Language Arts Extended Tasks (Students must meet or exceed standard on one task to satisfy the CIM requirements for ELA extended tasks)

Extended tasks take between two to four weeks to complete. Instructions vary, so teachers and students should carefully read and discuss these before beginning work. The rubric that is used to score the work is included with the task materials. This should be read carefully before beginning this task and should be re-read from time to time as the student does the work.

If you have Individual Education Plans (an IEP), you should take these tasks under conditions modified to conform to those plans: be sure your teacher knows this before you begin work.

Extended Task #1a — Shakespeare's Influence on Culture – Reflective Essay

This task addresses English/Language Arts Reading Standard E1c (reading and comprehending informational materials…to produce written work), Writing Standard E2f (produces a reflective essay), Conventions, Grammar, and Usage Standard E4a (habitually demonstrates an understanding of the rules of the English language), Conventions, Grammar, and Usage Standard E4b (analyzes and subsequently revises work to clarify it or make it more effective), Applied Learning Information Tools and Techniques Standard A3a (gathers information to assist in completing project work), and A3c (uses word-processing software to produce a multi-page document)

Extended Task #1b— Stereotyping in Life and Literature – Reflective Essay

This task addresses English/Language Arts Reading Standard E1c (reading and comprehending informational materials…to produce written work), Writing Standard E2f (produces a reflective essay), Conventions, Grammar, and Usage Standard E4a (habitually demonstrates an understanding of the rules of the English language), Conventions, Grammar, and Usage Standard E4b (analyzes and subsequently revises work to clarify it or make it more effective), Applied Learning Information Tools and Techniques Standard A3a (gathers information to assist in completing project work), and A3c (uses word-processing software to produce a multi-page document)

Extended Task #2— Being There, Getting There – Persuasive Essay

This task addresses English/Language Arts Reading Standard E1c (reading and comprehending informational materials to produce written work), Writing Standard E2e (produces a persuasive essay), Conventions, Grammar, and Usage Standard E4a (habitually demonstrates an understanding of the rules of the English language), Conventions, Grammar, and Usage Standard E4b (analyzes and subsequently revises work to clarify it or make it more effective), Applied Learning Information Tools and Techniques Standard A3a (gathers information to assist in completing project work), and A3c (uses word-processing software to produce a multi-page document)

Mathematics On-demand Tasks (Students must meet or exceed standard on two tasks to satisfy the CIM requirements for math on-demand tasks)

Each on-demand task requires 80 minutes as described in the student and teacher directions. The rubric that is used to score your work is included in each task and you should read this carefully before beginning your work.

If you have Individual Education Plan (an IEP), you should take these tasks under conditions modified to conform to those plans: be sure your teacher knows this before you begin work.

On-demand Task #2a -- Sail Away

This task addresses Mathematics Standard 2 (Geometry and Measurement Concepts).

On-demand Task #2b – Mason's Mission: Math Meets Mulch

This task addresses Mathematics Standard 2 (Geometry and Measurement Concepts).

On-demand Task #3a – Tailgating II

This task addresses Mathematics Standard 3 (Function and Algebra Concepts) and Mathematics Standard 2 (Geometry and Measurement Concepts).

On-demand Task#3b –Does the Length of the School Day Affect Graduation Rate?

This task addresses Mathematics Standard 3 (Function and Algebra Concepts).

On-demand Task#3c – Polygon Junction

This task addresses Mathematics Standard 3 (Function and Algebra Concepts) and Mathematics Standard 2 (Geometry **and Measurement Concepts).**

Mathematics Extended Tasks (Students must meet or exceedstandard on one task to satisfy the CIM requirements for extended math tasks)

Each extended task may require two weeks or more to complete. The rubric that is used to score your work is included in each task and you should read this carefully before beginning your work.

If you have Individual Education Plans (an IEP), you should take these tasks under conditions modified to conform to those plans: be sure your teacher knows this before you begin work.

Extended Task #4 Track Meet Scheduling

This task addresses Mathematics Standard 4 (Statistics and Probability concepts), Mathematics Standard 1 (Number and operation concepts), and Mathematics Standard 2 (Geometry and Measurement Concepts).

Extended Task #6 A Park Proposal

This task addresses Mathematics Standard 6 (mathematics Skills and Tools) and Mathematics Standard 8 (Putting Mathematics to Work) by creating a design for a physical structure.

Part 3 Work Habits

Why Do We Assess Work Habits?

Rhode Island students strive to achieve a Certificate of Initial Mastery in order to show that they have attained essential competencies in such diverse areas as high academic standards, career knowledge, communication and learning with others, responsible conduct, and the extension of their interests, skills and talents.

Along with the Capstone Project, the Work Habits assessments show a student's readiness to apply important skills and learning outside academic situations. A student who shows strong academic preparation and work habits is making good progress towards future employment and further education.

To meet these requirements, students provide evidence of their unique experiences and demonstrate their work ethic. Such experiences may be in the form of community service, service learning, paid employment, internships, job shadowing, or other relevant experiences in clubs, hobbies, athletics or youth organizations.

Work Habits: What are the Basic Skills?

The following lists describe the major skills and habits a student is expected to demonstrate:

1. Responsibility/Self Management

- takes responsibility for one's own actions
- completes assignments
- makes choices that are consistent with achieving one's goals
- perseveres in work tasks and shows consistency in performance

2. Teamwork

- contributes to team (expresses opinions, performs needed tasks, is flexible, can compromise, is tolerant of others)
- communicates effectively in team settings (clarifies, listens, helps to make decisions)
- takes on different roles (leads, supports as needed)
- meets responsibilities to the team reliably and consistently

Work Habits Assessment Design

Skill Area	Required Task
Responsibility	CIM Observation sheet applied in 2 different settings, one in school (could be Capstone) and one out of school setting — work, club, church....
Teamwork	CIM Observation Teamwork rating sheet from school or non-school activity

Roles and Responsibilities

Several people work together to help the student meet CIM standards for work habits. This section briefly describes their roles and responsibilities.

The Student should:

- Read the description and details of each skill and the scoring rubrics for each skill area in order to know how to complete the Work Habits chapter.

- Make arrangements with adults to evaluate Responsibility and Teamwork.

- Sign the sheet in the space provided before putting each rating sheet into the CIM folder. This indicates that the student has read and understood what the evaluator marked regarding his/her skills. Signing this line does not mean the student agrees with the evaluator; it means that the student has read the completed rating form.

- Organize the Work Habits chapter; write or type clearly; clip or put the chapter in a binder; and turn in the chapter on time.

- Follow any rules or schedules his/her teacher or Work Habits advisor establishes to make sure that all the material is turned in on time.

- Retrieve all necessary documents from the CIM coordinator.

Parents, Employers, Coaches, and Club Sponsors

Responsible adults are asked to seriously judge the CIM candidate who asks them to fill out a rating sheet. The following guidelines are intended to help you make that judgment. The rating sheet should already have the CIM candidate's name neatly written in the appropriate space for a name. Before signing it, you should:

- Read over the description of the skill and the questions before beginning to respond.

- Think about how long you have known this student, what kinds of situations have arisen in that time, and how the student performed.

- When the student clearly meets criteria for a skill, it is your responsibility to mark which element of the skill is present and whether it meets or exceeds your expectations.

- When the student does not meet criteria for a skill, it is your responsibility to mark which element of the skill the student shows occasionally or not at all.

- If there is no evidence or basis for judgment, you should mark N, for "no opportunity."

- Fill out each line of the rating form. Next to the question, provide sufficient detail to allow someone unfamiliar with the situation to understand the basis of your relationship with this candidate.

- Sign the form and date it. Return it to the student for him/her to read and sign as well. The student does not have to agree with the rating but is expected to read the rating before signing.

Work Habits Templates

Use the following lists to guide your actual work in the assessment of responsibility and work habits.

Checklist for CIM Coordinators/Advisors

- ❑ Do I understand the scoring rubrics associated with each skill and what evidence the student must assemble for each?

- ❑ Is there a reasonable timetable posted for students to follow?

Checklist for Students

- ❑ Do I understand the scoring rubrics for each skill?

- ❑ Do I know what evidence I must assemble for each skill area?

- ❑ Have I obtained the material (student guide, observation sheets) I need to do my independent work?

- ❑ Have I identified adults to evaluate me on Responsibility?

- ❑ Have I identified an adult to evaluate me on Teamwork?

- ❑ Have I given the evaluation form to my designated adult at least 6 weeks in advance of the final sign-off?

How Do Students Meet The Teamwork Requirement?

The appropriate form you should give to a coach, teacher, club leader, employer or other adult to evaluate you on Teamwork is on page 15. When you take the form to the person you select, remind those adults of how long you have been on the team or worked at the job. You might say, "I thought of asking you because you told me what a good leader I am," or some other remark that will help the adult remember times when you showed teamwork. It is up to this adult to fill out the form and sign it. After the adult signs and dates the completed rating form, you must read the rating and sign it. Your signature indicates that you have read and understood the evaluation.

The following are examples of appropriate teamwork activities for the CIM:

- • Taking a leadership role in an event, such as coaching a team sport for younger students;

- • Helping a club or youth group come to consensus about a new policy or activity;

- • Organizing a volunteer project or service learning activity for your community;

- • Helping a work group or club to resolve a conflict or negotiate some action needed;

- • Offering training or support to team members who are learning what to do in a musical group, sport, service learning project or school play.

These are not the only places where you could show teamwork. Think about what you do every day or every week and go over the evaluation form to see what is being evaluated--do you see a match to something you are doing in the community, at school or at home?

Evaluation of Student Teamwork

Student Name _____

Please describe how you know about the student's teamwork, the nature of the team and its task:

_____

_____

How long have you observed the student in this setting or activity? _____

_____

For each line, please mark: **Ex** if the student always shows this, **M** if the student often shows this, **Em** if the student occasionally shows this characteristic, and **0** if not at all. If you had no opportunity to see this characteristic, mark **N** on the line.

Does this student	Score	Please include comments
Contribute to a team by sharing ideas and views?		
Know when to speak and when to listen to help the team?		
Offer leadership when the team needs it?		
Support others who show leadership?		
Offer constructive feedback on others' ideas?		
Show flexibility and willingness to work for consensus?		

_____   _____
(signature of adult)   (date)   (print name/title)

_____
(signature of student)   (date)

Scoring Rubric: Teamwork

This area requires as documentation at least one independent rating sheet signed by an adult observer from an activity or class inside school or from outside school.

Element	Exceeds standard	Meets standard	Emerging
Contributes to team	Consistent long-term sharing of ideas, tasks, constructive feedback.	Offers views, shares ideas and also builds on others' ideas; offers constructive feedback; takes on team tasks.	Shares when prompted, gives some feedback, inconsistent building on others' ideas, tasks.
Communicates effectively in team setting	Consistent pattern of consensus-building through selective listening/speaking.	Redirects team conversation by knowing when to speak, when to listen, negotiating differences.	Inconsistent evidence of knowing when to speak, to listen, to negotiate.
Takes on different roles as needed	Shows flexibility in leading/ supporting across several different settings.	Rises to lead as needed but can support others' leadership in one major role setting.	Attempts to take on different roles in at least one setting.

No evidence = 0

Responsibility

On the next two pages you will find a standard format you should use to ask a coach, teacher, club leader, employer or other adult to evaluate you on the work habit of Responsibility. You should think about whom to ask very carefully. Look over the form and think about what it asks the evaluator to do. Since the adults you ask will have to write in how they know you, you may want to choose someone who has seen you acting responsibly on many occasions. Remember to choose one adult you know in school and one from outside school.

When you take the first form to the person inside school, remind that person about how long they have known you. You might say, "I thought of asking you because you told me what a good job I did on X," or some other remark that will help them remember some times when you showed a lot of responsibility. It is up to this adult, however, to fill out the form and sign it.

Similarly, when you take the second form to an adult from outside school, remind that person about how long they have known you.

Some people may not be comfortable evaluating students and may tell you that they would rather not. If that happens, you should thank them for their time and think of someone else who has had a chance to see you being responsible.

You may make copies of this sheet and ask more than one adult to fill it out. It is up to you to decide which form to turn in for the final CIM assessment. Only completed forms signed by an adult evaluator, then signed by you, can be used to fulfill the responsibility requirement.

Remember, a student must meet or exceed standard in all criteria of a Work Habits evaluation.

The following might be appropriate activities you could use in looking for an adult to evaluate responsibility for the CIM:

- Taking a role implementing an event, such as coordinating a food drive;

- Gathering signatures or donations for a special cause;

- Showing up for work or a volunteer activity every time, without fail, ready to help out;

- Taking on regular responsibilities in a service learning job, where people depend on you.

These are not the only places where you can demonstrate responsibility. Think about what you do every day or every week and go over the evaluation form to see what is being evaluated — do you see a match to something you are already doing?

Evaluation of Student Responsibility #1 — In School

Student Name _____

Please describe how you know the student _____

_____

_____

How long have you observed the student in this setting or activity? _____

_____

For each line, please mark: **Ex** if the student always shows this, **M** if the student often shows this, **Em** if the student occasionally shows this characteristic, and **0** if not at all. If you had no opportunity to see this characteristic, mark **N** on the line.

Does this student	Score	Please include comments
Take responsibility for actions without excuses?		
Recognize the consequences of choices/ actions?		
See the impact of regular attendance on performance?		
Fulfill attendance requirements for this activity?		
Do what he/she said he/she would?		
Demonstrate a connection between goals and choices?		

_____   _____
(signature of adult)   (date)   (print name/title)

_____
(signature of student)   (date)

Scoring Rubric: Responsibility #1 — In School

Element	Exceeds standard	Meets standard	Emerging
Takes responsibility for own actions	Clear pattern in past and in plans for future.	Clear pattern of recognizing and accepting consequences of own actions.	Inconsistent evidence of accepting consequences.
Makes choices aligned with goals	Strong pattern for both past and future choices.	Clear connection evident in documentation.	Some contradictory or missing aspects to connection.
Perseveres, shows consistency in performance, reliability, dependability	Several consistent pieces show strong long-term pattern of perseverance and dependability.	Evidence shows clear pattern of perseverance and dependability with no contradictions.	Inconsistent pattern or lacking long-term element.

No evidence = 0

Evaluation of Student Responsibility #2 — Outside School

Student Name _____

Please describe how you know the student _____

_____

_____

How long have you observed the student in this setting or activity? _____

_____

For each line, please mark: **Ex** if the student always shows this, **M** if the student often shows this, **Em** if the student occasionally shows this characteristic, and **0** if not at all. If you had no opportunity to see this characteristic, mark **N** on the line.

Does this student	Score	Please include comments
Take responsibility for actions without excuses?		
Recognize the consequences of choices/ actions?		
See the impact of regular attendance on performance?		
Fulfill attendance requirements for this activity?		
Do what he/she said he/she would?		
Demonstrate a connection between goals and choices?		

_____   _____
(signature of adult)   (date)   (print name/title)

_____
(signature of student)   (date)

Scoring Rubric: Responsibility #2 — Outside School

Element	Exceeds standard	Meets standard	Emerging
Takes responsibility for own actions	Clear pattern in past and in plans for future.	Clear pattern of recognizing and accepting consequences of own actions.	Inconsistent evidence of accepting consequences.
Makes choices aligned with goals	Strong pattern for both past and future choices.	Clear connection evident in documentation.	Some contradictory or missing aspects to connection.
Perseveres, shows consistency in performance, reliability, dependability	Several consistent pieces show strong long-term pattern of perseverance and dependability.	Evidence shows clear pattern of perseverance and dependability with no contradictions.	Inconsistent pattern or lacking long-term element.

No evidence = 0

Work Habits Summary Score Sheet (To be completed by CIM Coordinator)

Student Name _____

Directions: Review the evaluation sheets submitted by students. Be sure the responsible adults and the student sign each sheet. Evaluations must meet or exceed standard in each category.

Skill Area	Are ALL categories scored at "M" or above? (Yes or No)	Required Task
Responsibility		CIM Observation sheet, applied in 2 different settings, one in school and one out of school setting.
Teamwork		CIM Observation sheet Teamwork.

Evidence overall _____

_____

_____

_____

_____   _____
(Scorer signature)   (date)   (print name/title)

Part 4 Overview of The Capstone Project

Capstone Project — The Final Piece of a CIM

As the culmination of achieving a Certificate of Initial Mastery (CIM), the Capstone Project requires you to focus in-depth on a core question you choose. The Capstone Project is included in your CIM Portfolio and plays an essential part in demonstrating that you can meet both applied learning standards, RI Grade Span Expectations, and content standards.

There are four applied learning standards that you must meet in the Capstone Project. These are:

- Problem solving, (This A1 standard is the <u>core</u> of your Capstone Project)

- Using communication tools and techniques,

- Using information tools and techniques, and

- Applying self-management.

You choose how to meet these standards through your Capstone Project.

- In addition to the applied learning standards, you must also demonstrate competency in at least one content area. In the Capstone Project, you have the chance to choose content and performance standards in one or more areas to provide the focus of your applied learning.

The Capstone Project begins with your interest in exploring a question through in-depth learning and research. Then, you must organize and plan how to find answers to your question. Throughout the process a project advisor will guide you. Once the project is completed, you will present your results to a judging committee.

Core Question — The Heart of a Capstone

The first step in creating a Capstone Project asks you to identify a core question. Core questions arise out of your interests and should lead you to applied problem solving.

The core question should be open-ended and exploratory. It is a path to knowledge, which allows you to acquire knowledge and use that knowledge to solve problems. Your core question should focus on applied learning and works best when it is rooted in real-world issues. Your core question will lead you to the creation of an identifiable product that can be judged for how well it meets the applied learning and content standards you have chosen.

You should choose one of the following applied learning problem-solving standards:

- **Designing a product, service or system** Identify needs that could be met by new products, services, or systems and create solutions for meeting them;

- **Improving a system** Develop an understanding of the way systems of people, machines, and processes work; trouble shoot problems in their operation and devise strategies for improving their effectiveness; or

- **Planning and organizing an event or activity** Take responsibility for all aspects of planning and organizing an event or activity from concept to completion, making good use of the resources of people, time, money, materials and facilities. This event must include content standards.

Capstone Product — The What of a Capstone

Your Capstone Project provides you with a forum for analyzing, synthesizing, and implementing the skills and knowledge that you have gained throughout your education. Your Capstone Project is an opportunity to think critically about a subject of profound interest to you. Your Capstone Project will demonstrate that you have mastered a content area and can apply what you have learned to create a tangible product or service. Some examples are:

Examples of Design a Product, Service, or System, A1a

- Design a business plan; for example, a publication of a magazine for a student venture.
- Design a plan for development of a park or recreation area.
- Investigate an issue (social, political, scientific, moral/ethical, artistic) and propose possible solutions.
- Design a tutoring program for a software application.

Examples of Improve a System, A1b

- Improve the system for water treatment in a community.
- Design a curriculum unit to address a gap or a problem you have identified.
- Identify a problem within the structure of student government and make a proposed solution.
- Troubleshoot and repair faults in the operation of an automobile, mechanical device, or computer based system.

Examples of Plan and Organize an Event or an Activity, A1c

- Plan and organize a voter registration drive within the school or community.
- Arrange a series of career information seminars.
- Organize a community festival/business exposition.
- Organize an exhibition of student artwork.

Capstone Presentation — The How of a Capstone

The Capstone presentation is required after completing the Capstone product. This is your chance to showcase your work to an audience. You selected a topic of personal interest, researched it, created a product, service, or event, and produced a reflective narrative. You now have the opportunity to describe the process of learning, along with the results, to a judging committee. This is the culmination of your effort. Once you and your project advisor agree that your Capstone Product is ready, your advisor will contact your judging committee and give them a copy of your completed Capstone Product. During the presentation, you will be required to discuss the process and defend your response to your core question.

Choosing an Advisor

The Capstone Project Advisor is your guide for developing and executing your Capstone Project. As a coach, the advisor also acts as your advocate and liaison when problems arise. The specific roles and responsibilities include:

- Providing you with examples of high quality Capstone Projects helping you to establish standards for your projects.

- Assisting you in determining the appropriate content, RI Grade Span Expectations, and Applied Learning standards.

- Approving your proposal.

- Assisting you with the project rubrics that assess the applied learning and content standards for the project.

- Directing you to experts for assistance.

- Outlining a process that allows ongoing evaluation of the project's quality and rigor.

- Monitoring and helping you meet your project schedule.

- Providing the availability of an appropriate judging committee for the Capstone presentation.

- Evaluating the project and the presentation utilizing applied learning and content standards.

Guidelines and Sample Templates — Part 4

Capstone Roles and Responsibilities

Students – This refers to students who complete the Capstone either independently or within the frame work of a Capstone class.

- ❑ Identify a core question that allows an in-depth exploration of a topic whose goal is problem solving.

- ❑ Write a pre-proposal to share with the project advisor. The Capstone Project must address applied learning and content standards.

- ❑ Write a formal proposal and have it approved by the project advisor.

- ❑ Work with advisor to identify experts who can help with the project.

- ❑ Maintain a journal, documenting ALL of your work on the project and share it with your advisor. Reflection and revision will be an ongoing part of the process.

- ❑ Develop and adhere to a timeline for the major activities in your project, including regular meetings with the project advisor. Share it with the project advisor.

- ❑ Conduct thorough research on content. Document your progress with photos or video if applicable. Consult regularly with your advisor to ensure that you are meeting the requirements of your content standards.

- ❑ Keep an annotated list of sources used. This must be included in your final product.

- ❑ Maintain a portfolio of the various Capstone components: time line, research, annotated list of resources, journals, etc.

- ❑ Refer to the final product rubric that reflects the New Standards Applied Learning Standards, the RI Grade Span Expectations, and content standards selected for your Capstone Project.

- ❑ Complete the final product.

- ❑ Obtain outside evaluation of your product if appropriate.

- ❑ Provide adequate self-evaluation of your product.

- ❑ Review the final product with the project advisor before the final presentation. Make any necessary changes in sufficient time for the judging committee to review the product.

- ❑ Refer to the final oral presentation rubric.

- ❑ Prepare a folder for review by the judges of your final presentation.

- ❑ Write a reflective narrative and include it in your folder.

- ❑ Include media that effectively communicate the necessary elements of your presentation.

- ❑ Present the Capstone product to the judging committee.

- ❑ Revise your Capstone Project if you do not meet standard.

You are ultimately responsible for the success of the Capstone Project. You must work closely with the Capstone Project Advisor (and Capstone Project teacher where applicable).

Advisors (and Capstone Teacher where applicable)

The Capstone Advisor is the guide for developing and executing the Capstone Project. As a coach, the advisor also acts as the student advocate and liaison when problems arise. The advisor must be a member of the school faculty. A student may also choose to work with a mentor from the community.

- ❑ Introduce the student to the design of a Capstone Project.

- ❑ Help student identify a core question.

- ❑ Help student identify the appropriate content standards.

- ❑ Assist the student in developing an accepted proposal that addresses the required applied learning, grade span expectations, and content standards. Review and agree to any changes after the original proposal is accepted.

- ❑ Monitor the process of completing the project.

- ❑ Review the student's Capstone portfolio for proper documentation.

- ❑ Assist student in identifying appropriate expert(s) to assist with his/her project.

- ❑ Review and revise the project timeline with the student, establish a reporting schedule for the student to report on progress to the advisor.

- ❑ Make certain the student is familiar with the appropriate applied learning standards and all rubrics that will guide the student during the project.

- ❑ Monitor the student's progress in content research.

- ❑ Review the final product and the reflective narrative before the Capstone presentation. Identify changes that must be made before the student can present.

- ❑ Attest that the student's content is sufficient to meet standard.

- ❑ Assist the student in determining the appropriate items to be included in the final presentation folder.

- ❑ Attend and take part in evaluation of student's final presentation.

- ❑ Provide feedback to student on final presentation of Capstone Product.

SAMPLE CAPSTONE ADVISOR TIMELINE

Every week you should check the following:
- Annotated sources
- Journals (this will give you a good idea of what student is doing, how he/she is progressing)
- Set short and long-term goals, add to and edit timelines, and verify that the student is going in the right direction.

Stage One
- Discuss, review, and sign proposal
- Examine 3 final rubrics and use these to guide student work
- Identify content standards
- Create a plan for research

Stage Two
- Identify sources of evidence and check validity
- Select most important evidence and place into context
- Discuss challenges and roadblocks (What's missing? Will this information help me produce my product? What needs to be improved, changed, redone, redefined, etc?)
- Reexamine rubrics and use as a guide for the next phase

Stage Three
- Product and multi-media presentation should be taking tangible shape
- Final research completed
- Begin to rehearse oral presentation
- Examine 3 final rubrics to improve product and presentation

Stage Four
- Complete product
- Sign off on Applied Learning and Content Rubrics at least one week prior to oral presentation
- Rehearse oral presentation
- Make sure that evidence is cited throughout the oral and multi-media presentations, as well as the final product.

School/District

The school and district must be committed to creating a support system that enables you to accomplish the Capstone Project. It is recommended that these roles be aided by a CIM Coordinator. Some specific roles and responsibilities include:

- ❑ Providing advisors with support, staff development, and leadership.

- ❑ Informing parents / guardians of the requirements of the Capstone Project.

- ❑ Providing students with time/permission/resources to conduct the work to complete the Capstone Project.

- ❑ Arranging a system to allow students, during school hours, to conduct off-campus research, internships, and activities.

- ❑ Compiling and keeping an up-to-date list of outside resources that can assist in supporting and mentoring students.

- ❑ Managing the organization necessary for the Capstone presentations, including scheduling presentations, finding appropriate judges, and securing other resources (e.g., equipment, space, etc.).

- ❑ Providing training for members of the judging committee.

- ❑ Providing the judging committee with copies of the reflective narrative and final product prior to the presentation.

- ❑ Coordinating the scoring of the final project and presentation with the judging committee.

- ❑ Ensuring that the final evaluation of Capstone Project and presentation are properly entered into the student record.

- ❑ Maintaining proper record-keeping of CIM tasks.

Judging Committee

The judging committee provides feedback to you on your Capstone Project and presentation. The judging committee is comprised of the project advisor and other adults from both the faculty of the school and the community at large. Their specific roles and responsibilities include:

- ❑ Participating in training for judging Capstone final presentation.

- ❑ Attending the Capstone presentation.

- ❑ Reviewing the student's folder.

- ❑ Judging the quality of the presentation utilizing the presentation rubric.

- ❑ Submitting a score on the final presentation.

Parent, Guardian, Community Adult

The Capstone Project generally will require the active support of an adult(s) outside of school to assist you in managing logistics and acquiring resources. Specific roles and responsibilities include:

❑   Assisting you in making adequate progress on your Capstone Project.

❑   Whenever possible, attending the Capstone presentation.

Applied Learning Standards (A1)

Below is the information on the Applied Learning Standards that you will need to select for your CIM Capstone Project.   Use the subsequent pages to assist you in choosing from the requirements below.

A1:   Choose one of the problem solving standards.

    a)   Design a Product, Service or System

    b)   Improve a System

    c)   Plan and Organize and Event or an Activity

A2: Choose (a) and one other standard.

If your product in A1 is a multimedia presentation, such as a movie, then you must choose to write a report (A2b). If your product in A1 is a report, then you must choose to make a multimedia presentation. (A2c)

a)   The student makes an oral presentation of project plans or findings to an audience with expertise in the relevant subject matter.

b)   The student prepares a formal written proposal or report to an organization beyond the school.

c)   The student develops a multi-media presentation combining text, images, and/or sound.

A3: Choose (a) and one other standard.

(a) The student gathers information to assist in completing project work.

(b) The student uses on-line sources to exchange information for specific purposes.

(c) The student uses word-processing software to produce a multi-page document.

(d) The student writes, adds content to, and analyzes a database program that uses a relational database.

(e) The student creates, edits, and analyzes a spreadsheet of information that displays data in tabular, numeric format and includes multiple graphs.

A4:   Choose two of the standards below.

a)   The student learns from models.

b)   The student reviews his or her own progress in completing work activities and adjusts priorities as needed to meet deadlines.

c)   The student evaluates his or her performance.

A1 Problem Solving - You must build your project around <u>one</u> of the three standards listed below (A1a, A1b, A1c).

Identify the problem or issue you are trying to address. After writing the description of the problem review the three Problem Solving standards below and select the standard (A1a, A1b, or A1c) most appropriate to guide the work you do for your capstone project. You must address each bullet under the main standard you select.

Each project must involve subject matter related to the standards from English Language Arts, and/or mathematics and/or science, and/or other subject areas.

Choose either A1a A1b or A1c	**A1a Design a Product, Service or System** The student identifies needs that could be met by new products, services, or systems and creates solutions for meeting them, that is the student: - Develops a design proposal that: - shows how the ideas for the design were developed; - reflects awareness of similar work done by others and of relevant design standards and regulations; - justifies the choices made in finalizing the design with reference, for example, to functional, aesthetic, social, economic, and environmental considerations; - establishes criteria for evaluating the product, service, or system; - uses appropriate conventions to represent the design; - plans and implements the steps needed to create the product, service, or system; - makes adjustments as needed to conform with specified standards or regulations regarding quality or safety; - evaluates the product, service, or system in terms of the criteria established in the design proposal, and with reference to: - information gathered from sources such as impact studies, product testing, or market research; - comparisons with similar work done by others. - A product can take one of two forms: - A physical product designed to provide a preliminary solution to a problem. - An intellectual product which includes critical analysis of primary and secondary sources that investigates an issue and proposes alternative solutions.

Check the standard you have chosen.	**A1b Improve a System**
	
	The student develops and understanding of the way systems of people, machines, or processes work; troubleshoots problems in the operation of a system in need of repair or devises and tests ways of improving the effectiveness of a system in operation, that is the student:
	
	• explains the structure of the system in terms of its:
	   • logic, sequences, and control;
	   • operating principles, that is, the mathematical, scientific, and/or organizational principles underlying the system;
	
	• analyzes the way the system works, taking account of its functional, aesthetic, social, environmental and commercial requirements, as appropriate, and using a relevant kind of modeling or systems analysis;
	
	• evaluates the operation of the system, using qualitative methods and/or quantitative measurements of performance;
	
	• develops tests strategies to put the system back in operation and/or optimize its performance;
	
	• evaluates the effectiveness of the strategies for improving the system and supports the evaluation with evidence.
	
	A1c Plan and Organize an Event or an Activity
	
	The student takes responsibility for or all aspects of planning and organizing an event or an activity from concept to completion making good use of the resources of people, time, money, materials and facilities, that is the student:
	
	• develops a planning schedule that:
	   • is sensible in terms of the goals of the event or activity;
	   • is logical and achievable;
	   • reflects research into relevant precedents and regulations;
	   • takes account of all relevant factors;
	   • communicates clearly so that a peer or colleague could use it;
	• implements and adjusts the planning schedule in ways that:
	   • make efficient use of time, money, people, resources, facilities;
	   • reflect established priorities;
	   • respond effectively to unforeseen circumstances;
	• evaluates the success of the event or activity using qualitative and/or quantitative methods;
	• makes recommendations for planning and organizing subsequent similar events or activities.

Supporting Applied Learning Standards (A2)

Each of the Applied Learning Standards below must be incorporated into your Capstone Project as indicated.

A2 Communication Tools and Techniques

You must make an oral presentation A2a and select one of the other two standards (A2b or A2c).

If your product in A1 is a multimedia presentation, such as a movie, then you must choose to write a report (A2b). If your product in A1 is a report then you must choose to make a multimedia presentation, (A2c).

In addition to A2a, check the other standard you have chosen.	**A2a The student makes an oral presentation of project plans or findings to an audience with expertise in the relevant subject matter, that is the student:**
	• organizes the presentation in a logical way appropriate to its purpose;
	• adjusts the style of presentation to suit its purpose and audience;
	• speaks clearly and presents confidently;
	• responds appropriately to questions from the audience;
	• evaluates the effectiveness of the presentation and identifies appropriate revisions for a future presentation.
	A2b The student prepares a formal written proposal or report to an organization beyond the school, that is the student:
	• organizes the information in the proposal or report in a logical way appropriate to its purpose;
	• produces the proposal or report in a format similar to that used in professionally produced documents for a similar purpose and audience.
	A2c The student develops a multi-media presentation combining text, images, and/or sound, that is the student:
	• selects an appropriate medium for each element of the presentation;
	• uses the selected media skillfully, including editing and monitoring for quality;
	• achieves coherence in the presentation as a whole; communicates the information effectively, testing audience response and revising the presentation accordingly

Supporting Applied Learning Standards (A3)

A3 Information Tools and Techniques

You must complete A3a and **in addition select one** of the other four standards below (A3b, A3c, A3d, or A3e).

Choose A3a and one other standard.	**A3a The student gathers information to assist in completing project work, that is the student:** • identifies potential sources of information to assist in completing the project; • uses appropriate techniques to collect the information, e.g., considers sampling issues in conducting a survey; • interprets and analyzes the information; • evaluates the information in terms of completeness, relevance, and validity; • shows evidence of research in the completed project. **A3b The student uses on-line sources to exchange information for specific purposes, that is the student:** • uses E-mail to correspond with peers and specialists in the subject matter of their projects; • incorporates into E-mail correspondence data of different file types and applications. **A3c The student uses word-processing software to produce a multi-page document, that is the student:** • uses features of the software to create and edit the document; • uses features of the software to format the document, including a table of contents, index, tabular columns, charts, and graphics; • uses features of the software to create templates and style sheets for the document. **A3d The student writes, adds content to, and analyzes a database program that uses a relational database, that is the student:** • writes a program capable of handling data with at least two files; • creates macros to facilitate data entry, analysis, and manipulation; • creates multiple report formats that include summary information; • merges data from the data base with other files. **A3e The student creates, edits, and analyzes a spreadsheet of information that displays data in tabular, numeric format and includes multiple graphs, that is the student:** • creates a spreadsheet that displays the use of formulas and functions; • uses features of the software to sort, arrange, display, and extract data for specific purposes; • uses features of the software to create multiple spreadsheets and to synthesize the spreadsheets into a single presentation.

Supporting Applied Learning Standards (A4)

A4 Learning and Self-Management Tools and Techniques

You must select two standards below and incorporate them into your Capstone Project.

Select two standards.	**A4a The student learns from models, that is the student:**
	• consults with and observes other students and adults at work and analyzes their roles to determine the critical demands, such as demands for knowledge and skills, judgment and decision making;
	• identifies models for the results of project work, such as professionally produced publications, and analyzes their qualities:
	• uses what he or she learns from models in planning and conducting project activities.
	A4b The student reviews his or her own progress in completing work activities and adjusts priorities as needed to meet deadlines, that is the student:
	• develops and maintains work schedules that reflect consideration of priorities;
	• manages time;
	• monitors progress towards meeting deadlines and adjusts priorities as necessary.
	A4c The student evaluates his or her performance, that is the student:
	• establishes expectations for his or her own achievement;
	• critiques his or her work in light of the established expectations;
	• seeks and responds to advice and criticism from others.

Proposal Worksheet

Use this sheet to develop your Capstone Project proposal. Make sure you address each of the components. Meet with your advisor to discuss the proposal. Both of you must sign the final proposal.

I. Core Question

Based on your interests, clearly stated as a question, open-ended and exploratory, related to real-world issues whenever possible, and directed toward a path to knowledge.

My Core Question is

_____

_____

_____

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My Capstone project title is

_____

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II. Select the Applied Learning Standards for the Project

After selecting the appropriate standards below, describe how you will use the standard and the indicators in your project.

The Applied Learning Standards for my project are:

A1Problem Solving: Choose one of the problem solving standards.

(a)Design a Product, Service or System (b) Improve a System (c) Plan and Organize an Event or an Activity   _____

– _____

_____

A2 Communication Tools and Techniques: Choose (a) and one other standard.

If your product in A1 is a multimedia presentation, such as a movie, then you must choose to write a report (A2b). If your product in A1 is a report, then you must choose to make a multimedia presentation. (A2c)

(a) The student makes an oral presentation of project plans or findings to an audience with expertise in the relevant subject matter. (b) The student prepares a formal written proposal or report to an organization beyond the school. (c) The student develops a multi-media presentation combining text, images, and/or sound. _____

_____

_____

A3 Information Tools and Techniques: Choose (a) and one other standard.

(a) The student gathers information to assist in completing project work. (b) The student uses on-line sources to exchange information for specific purposes. (c) The student uses word-processing software to produce a multi-page document. (d) The student writes, adds content to, and analyzes a database program that uses a relational database. (e) The student creates, edits, and analyzes a spreadsheet of information that displays data in tabular, numeric format and includes multiple graphs. _____

_____

_____

A4 Learning and Self Management Tools and Techniques: Choose two of the standards below.

(a) The student learns from models. (b) The student reviews his or her own progress in completing work activities and adjusts priorities as needed to meet deadlines. (c) The student evaluates his or her performance._____

_____

_____

III. Select the Content Standard(s) and Grade Span Expectations (where applicable) for the Project

With your project advisor select at least one content area and the related performance standards that will be addressed by the project. As well as indicating the standard or GSE number, you need to include the wording.

The content area and related performance standards for my project are

_____

_____

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IV. Overview of the Proposed Capstone Project

Write a brief description of your Capstone project plan. In your description, include the project's field of inquiry, industry, or discipline you plan to investigate. Based on the sub-group of the Applied Learning Problem Solving standard you have chosen, describe the problem that the Capstone Project is trying to solve.

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V. Explanation of Why You Selected this Project

Write a brief explanation of why you chose this particular field of inquiry, industry, or discipline to investigate.

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VI. Preliminary List of Research Resources

Use the space below and extra sheets if needed, to list the books, journals, web sites, individuals, industries, or organizations that you will need to consult in order to complete this project.

_____

_____

_____

_____

_____

_____   _____
(Project Advisor's Signature)   (date)

_____   _____
(Student's Signature)   (date)

CIM Capstone Project Timeline

Once you and your advisor have agreed on the proposal, fill out a schedule of the work activities that you need to do in order to complete the Capstone Project successfully. Then, meet with your advisor to discuss the schedule. The timeline might change as the project progresses, but you need to be as specific as possible here.

Instructions

- Chronologically list all the major pieces of work you need to do from the beginning to the end of the project.

- List the resources to help you complete that activity such as research material, individuals to contact, and locations to visit.

- Write down the evidence that you will compile to show that each work activity has been successfully completed. You and your advisor need to work together to identify the evidence.

- It is recommended that you meet bi-weekly with your advisor to discuss the evidence you have provided.

Keep all the project documents related to your work activities together so that you can present them with your Capstone Project.

Capstone Process Journal Guidelines

Your journal is a reflection of your progress in problem solving. It also documents all the work you have accomplished for your project.   It should be neat and organized. You may want to type it, especially if your handwriting is not neat. Your journal entries should not summarize your activities in the classroom.

The following are guidelines for what your journal needs to include and what it should look like when it is finished.

Specific criteria to include in each of your entries:

- Timeline
  - Starting dates for each activity
  - Estimated date of completion
- Evidence to show that each work activity has been successfully completed
- Reflection that shows evidence of problem solving.

To document your completion adequately, you must include some entries that reflect the following:

- Resources to help you complete the activity (materials, individuals to contact, locations to visit)
- Planned steps (what you did, what you saw, what you heard)
- Modifications you made to your original plan
- Evidence that demonstrates successful completion of activity
- Specific standards and/or GSESs addressed

A non-example would be:

September 16, 1999

I met my mentor and we talked about my project. Worked on my proposal. Made a journal entry.

Total hours: 5

An example of an appropriate journal entry:

September 16, 2004

Today, I met with my mentor for the first time for about an hour. My mentor is a mechanic who specializes in Ford engines. I told him about my plan to rebuild my '67 Mustang engine and put it in my car. I told him what I think the problems are, which are that the block is cracked, the engine needs new heads and pistons, and the carburetor is damaged and needs new parts. My mentor agreed to come take a look at the engine next week on Wednesday so we can determine if there is anything else that is wrong and figure out approximately how much this is going to cost me. The second hour I spent working on my proposal. I'm having trouble deciding how I am going to research engines and exactly what I need to learn to complete this project. I also typed my overview so I can show it to my teacher tomorrow. I hope she approves it! All of my work today related to Applied Learning 1b — I'm improving a system (my car engine).

(Journal examples adapted from Mountlake Terrace High School Journal Guidelines)

Reflective Narrative Guidelines

The reflective narrative affords students the opportunity to reflect upon their experiences. This reflection includes a chance to summarize the project, address problems encountered, analyze problem-solving strategies employed, and describe resulting learning and personal growth. It provides your evaluators with the background and context needed to understand the depth and scope of your project.

Your reflection must include the following:

- A summary of the research and components of your project

- A reflection on the problem solving process you undertook. This could include consideration of questions such as the following:

- What obstacles did you face?

- What solutions did you bring forth?

- What results or findings did you conclude?

- What would you have done differently and why?

- How would you use what you have learned in the future?

- Of what component are you the most proud and why?

- What advice would you give to a student undertaking a similar process?

- A reflection of your "new" learning

- A description of the role that your mentor or outside sources played in your project

- A reference to the appropriate Applied Learning and content standards.

Your reflection must also contain:

- An organizational structure that allows for a progression of ideas to develop and that includes:

- An introduction that engages the reader and establishes a context

- Clear development of ideas

- Closure

- Writing which meets or exceeds expectations for usage and mechanics (see attached rubric/checklist)

Reflective Narrative Review

	Standards	On Standard	Needs Revision

An organizational structure that allows for a progression of ideas to develop which includes:
  o An introduction that engages the reader and establishes a context
  o Clear development of ideas
  o Closure
	W-12-14.1 14.3, 14.5		

A summary of the research topic and components of your project			
A reflection on the problem solving process you undertook (including: obstacles, solutions, results/findings)	NCEE A1		
A reflection of your "new" learning			
A description of the role that your mentor or outside sources played in your project			
Analysis of the experience that conveys personal insight leading to new perspectives	W-12-14.6		
A reference to the appropriate Applied Learning and content standards	NCEE A1-A5		
Writing which meets or exceeds expectations for usage and mechanics (see attached rubric)	W-1 W-9		

Note: Checklist created based on consultation of GSE W-12-14 (Reflective Essay) and NCEE Applied Learning Standards

Evaluation Rubrics

The following pages contain a series of rubrics that are to be used in the final evaluation of your product and presentation. With your advisor, review the following rubrics and determine whether your final project has met the appropriate Applied Learning and content standards you selected. There is a copy of the Applied Learning standards in this manual. You will notice that each Applied Learning standard is made up of several parts (identified by lower-case letters), and there are performance descriptions of what students are expected to know and be able to do for each part. You can use these performance descriptions to determine the criteria for meeting the parts of the standards your project addresses.

Final Product Rubric Components:

The following rubrics should be consulted to determine whether a student's final product meets or exceeds standard:

Applied Learning standard, you must use either:

- A1a – Designing a Physical Product, Service, or System.............
- A1a – Designing an Intellectual Product.......................................
- A1b – Improving a System...
- A1c – Planning an Event or Activity ....

In addition:

Final Product Rubric for Content...

Writing Conventions Rubric

Final Presentation Rubric:

For the final oral presentation, the following rubric must be consulted:

- **Oral Presentation Rubric** ....

This presentation rubric should be used to evaluate the oral component of the Capstone Project, regardless of the Applied Learning standard (A1a, A1b, A1c) the student selects for his/her project. This rubric is based on RI Grade Span Expectations, the New Standards Applied Learning Standard A2, and English Language Arts Standard E3c. A student MUST meet standard on all indicators of the content section.

Final Product Rubrics

It is understood that a student who exceeds the standard for any rubric has met all the indicators listed under Meets Standards and the indicators under Exceeds the Standard.

Problem Solving Rubric — A1a Designing a Physical Product, Service, or System

Category	Exceeds Standard	Meets Standard	Below Standard
Design Ideas	· Demonstrates sophisticated ideas for the design of the service or system, which reflects awareness of similar work done by others and relevant design standards and regulations.	· Demonstrates clear ideas for the design, which reflects awareness of similar work done by others and relevant design standards and regulations.	· Demonstrates limited ideas for the design, which may not reflect awareness of similar work done by others and relevant design standards and regulation.
Choices	· Provides detailed justification of choices made in finalizing the design, for example, functional, aesthetic, social, economic, and environmental considerations.	· Justifies choices made in finalizing the design, for example, functional, aesthetic, social, economic, and/or environmental considerations.	· Lacks justification of choices made in finalizing the design.
Establishing Criteria	· Demonstrates considerable thought in establishing criteria for evaluating the product, service, or system. · Uses sophisticated conventions to represent the design.	· Demonstrates thought in establishing criteria for evaluating the product, service or system. · Uses appropriate conventions to represent the design.	· Lacks criteria for evaluation of the product, service or system. · Lacks appropriate conventions to represent the product, service or system.
Implementation	· Provides a detailed outline of the planning and implementation steps necessary to create the product, service or system. · Makes creative adjustments as needed to conform with specified standards or regulations regarding quality or safety.	· Provides evidence of good planning and implementing of steps needed to create the product, service, or system. · Makes adjustments as needed to conform with specified standards or regulations regarding quality or safety.	·Does not provide description of the steps needed to plan and implement the product, service or system. · Lacks evidence of adjustments needed to conform with specified standards or regulations regarding quality or safety.
Product Evaluation	· Provides sophisticated evaluation of the product, service or system in terms of the criteria established in the design proposal and with reference to information gathered. · Provides accurate and in-depth comparisons with similar work done by others.	· Provides thoughtful evaluation of the product, service, or system in terms of criteria established in the design proposal and with reference to information gathered. · Demonstrates relevant comparisons with similar work done by others.	· Exhibits limited evaluation of the product, service or system in terms of the criteria established in the design proposal and with reference to information gathered. · Does not provide sufficient comparisons with similar work done by others.

Problem Solving Rubric — A1a Designing an Intellectual Product, Service, or System

Category	Exceeds Standard	Meets Standard	Below Standard
Design Ideas	· Develops an analytical, critical paper that provides a detailed description of how the ideas for the paper were formulated.	· Develops an analytical, critical paper that demonstrates how the ideas for the paper were formulated.	· Develops a paper that is not analytical and fails to demonstrate how the ideas for the paper were formulated.
Research	· Chooses and analyzes sophisticated research for intended product. . Reflects thorough understanding of similar work done by others and presents it in a acceptable literary format.	· Chooses and analyzes adequate and valid research for intended product. . Reflects awareness of similar work done by others and presents it in an acceptable literary format.	· Fails to provide adequate and valid research. . Lacks awareness of similar work done by others in an unacceptable literary form.
Choices	· Demonstrates sophisticated justification of choices with reference to functional, aesthetic, social, economic, or environmental consideration.	· Justifies choices made with reference to functional, aesthetic, social, economic, or environmental considerations.	· Lacks justification of choices with little or no references to functional, aesthetic, social, economic, or environmental considerations.
Establishing Criteria	· Establishes detailed criteria for analysis, developmental and critiquing of the topic.	· Establishes criteria for analysis, development and critique of the topic.	· Lacks establishment of criteria for analysis, developmental and critiquing of the topic.
Implementation	· Demonstrates sophisticated evidence of planning and development of the topic.	· Demonstrates evidence of planning and development of the topic.	· Does not establish criteria for development of the topic.
Conventions	· Demonstrates sophisticated use of appropriate conventions to establish the topic.	· Uses appropriate conventions to establish the topic.	· Demonstrates poor use of conventions to establish the topic.
Product Analysis / Evaluation	· Demonstrates sophisticated evaluation and critical analysis of the topic in terms of research and comparison to similar work done by others.	· Demonstrates thoughtful evaluation and critical analysis of the topic in terms of research and comparison to similar work done by others.	· Provides insufficient evaluation and critical analysis of the topic in terms of research and comparison to similar work done by others.

Problem Solving Rubric — A1b Improving a System

Category	Exceeds Standard	Meets Standard	Below Standard
Aim of the Project	· Provides a detailed intended outcome of the project, which includes information about the problem that was being solved or the need being met, and clearly articulates the reasons and decision-making process used to select the project.	· Provides a description of the intended outcome of the project which includes information about the problem that was being solved or the need being met, and why the project was selected.	· Does not clearly explain the intended outcome of the project or provides little information about the problem that was being solved, the need being met, or why the project was selected.
Structure of the System	· Provides an excellent explanation of the structure of the system including the logic and sequence. · Makes clear how the principles underlying the system were used to establish criteria for analyzing the system.	· Provides a clear explanation of the structure of the system. · Considers the logic, sequence, and operating principles underlying the system.	· Does not clearly explain the structure of the system. · Displays little or no attention to the logic, sequence, and operating principles underlying the system in the planning and implementation phases.
Analysis of the System	· Advances an extremely detailed analysis of the system that demonstrates a clear understanding of the functional, aesthetic, social and environmental requirements of the system as appropriate. · Compares and contrasts the system to other systems and thoroughly takes into account central requirements and underlying principles.	· Provides an analysis of the system that compares and contrasts the system to other systems and thoroughly takes into account functional, aesthetic, social and environmental requirements as appropriate.	· Advances a rudimentary analysis and makes little or no attempt to compare and contrast the system to other systems. · Gives little or no consideration to functional, aesthetic, social and environmental requirements.

Evaluation of the System	· Insightfully evaluates the operation of the system, using qualitative methods and/or quantitative measurements of performance. · Thoroughly describes the strategies used to evaluate and improve the system and includes the collected and recorded data. · Presents the collected and recorded data in a variety of forms and highlights any changes in performance between the current system and the original system, and the factors that contributed to the change in performance.	· Evaluates the operation of the system, using qualitative methods and/or quantitative measurements of performance. · Describes the strategies for collecting and recording data and any changes in performance between the current system and the original system.	· Displays minimal strategies to evaluate the operation of the system, using qualitative methods and/or quantitative measurements of performance. · Offers limited descriptions of the strategies used, and/or failed to evaluate the performance of the system at the outset.
Develops Strategies for Improvement	· Displays comprehensive test strategies for improving the system. · Connects the analysis of data back to all aspects of the strategies presented and clearly shows how the strategies flowed from the analysis of data.	· Offers effective test strategies for improving the system. · Connects the analysis of data back to the strategies presented, and clearly shows how the strategies flowed from the analysis of data.	· Selects inappropriate test strategies for improving the system. · Is unable to connect these strategies back the original data and/or analysis of the system.
Evaluates the Effectiveness of Strategies for Improving the System	· Evaluates the effectiveness of the strategies for improving the system. · Supports the analysis with data and thoroughly connects the explanations of how well the results matched to the criteria used in the evaluation.	· Evaluates the effectiveness of the strategies for improving the system. · Supports the analysis with data and an explanation of how well the results matched the criteria	· Does not differentiate the effectiveness of the various strategies for improving the system. · Cannot substantiate, with data, how well each strategy worked.

Problem Solving Rubric — A1c Planning an Event or Activity

Category	Exceeds Standard	Meets Standard	Below Standard
Purpose of the Project	· Utilizes content standards from a variety of disciplines as a rationale for planning and as integral components of the event or activity.	· Utilizes content standards as a basis for the rationale for planning, and as an integrated component of the event or activity. · Presents evidence that references the problem or the need for the event or activity.	· Lacks sufficient evidence of use of content standards as a rationale for planning the event or activity.
Plan	· Demonstrates in-depth research into a broad range of precedents and regulations. · Develops a very detailed planning schedule that facilitates implementation and takes into account the resources necessary, and the goals of the event or activity. . Thoroughly describes the steps necessary to put the plan into action.	· Demonstrates that proper research into relevant precedents and regulations has been completed. · Writes a logical and achievable planning schedule that: efficiently uses the resources available; reflects the goals of the event or activity; and is easily understood by the intended audience. . Clearly describes the steps necessary to put the plan into action.	· Shows insufficient research of relevant precedents and regulations. · Fails to include important details or research or to reflect the goals of the event or activity in the planning schedule. . Inadequately describes or fails to describe the steps necessary to put the plan into action.
Implementation	· Includes detailed annotations or documentation of the implementation and adjusts the schedule in a manner that reflects reaction to as well as anticipation of established priorities and/or unforeseen circumstances. · Makes excellent use of time, money, people, resources and facilities within the schedule.	· Implements the plan and adjusts the schedule in ways that reflect the established criteria and responds effectively to unforeseen circumstances. · Makes efficient use of time, money, people, resources and facilities.	· Omits details in schedule or fails to make key steps clear or fails to demonstrate completion of the event or activity. · Fails to adjust the schedule to compensate for unforeseen circumstances. · Uses time, money, people, resources or facilities inefficiently.
Evaluation	· Evaluates the success of the completed event or activity using a variety of quantitative and/or qualitative methods. · Makes well-constructed and thoughtful recommendations for planning and organizing subsequent similar events or activities.	· Evaluates the success of the completed event using appropriate qualitative and/or quantitative methods in terms of the established criteria. · Makes recommendations for others planning a similar event or activity in the future.	· Uses inappropriate or insufficient quantitative and/or qualitative methods to evaluate the success of the completed event or activity. · Does not include or shows insufficient reflection on recommendations for future events or activities.

Final Product Rubric

Content Rubric

This rubric should be used to evaluate the content of both the written and oral components of the student's Capstone Project, regardless of the Applied Learning standard (A1a, A1b, A1c) the student selects for his/her project. The rubric is based upon standards and indicators from New Standards AL 2 and 3; E2a, b, e; and E4.

Category	Exceeds Standard	Meets Standard	Below Standard
Finding/ Citing Information	· Acquires extensive and relevant information from multiple sources such as print, graphic, internet, computer databases, and experimentation. When appropriate generates primary source information. · Shows evidence in research processes that is both extensive and relevant and uses a variety of appropriate options to enhance report. . Uses proper MLA or APA format.	· Acquires adequate information from multiple sources such as print, graphic, internet, computer databases, and experimentation. When appropriate generates primary source information. · Supports arguments with detailed evidence, citing sources of information as appropriate. . Uses proper MLA or APA format.	· Does not provide necessary information from outside sources. · Shows limited evidence of adequate research processes. · Lacks proper MLA or APA citations.
Evaluating Information	· Clearly distinguishes the relevancy and reliability of information and its impact on the credibility of topic. · Provides an indepth evaluation of the accuracy and quality of the information using multiple sources.	· Includes relevant, accurate, and reliable information appropriate for the topic. · Evaluates the accuracy and quality of the information along with sources used to access it.	· Excludes information that is relevant and/or critical that could enhance report. · Is unable to differentiate between what is and is not accurate or reliable material.
Analyzing and Synthesizing Information	· Conducts a thorough analysis of information and synthesizes it into new knowledge. · Advances a judgment that is interpretive, analytical, evaluative, and reflective and supported with multiple references. . Uses a range of sophisticated strategies to elaborate and/or persuade such as definitions, descriptions, illustrations, and examples from evidence and/or anecdotes.	· Conducts clear analysis of the information gathered. · Advances a judgment that is interpretive or analytic. . Uses a range of strategies to elaborate and/or persuade such as definitions, descriptions, illustrations, and examples from evidence and/or anecdotes.	· Includes a basic analysis with little or no attempt at synthesizing information into new knowledge. . Fails to use a range of strategies to elaborate and/or persuade.

Conventions	· Demonstrates exemplary control of grammar, paragraph structure, punctuation, sentence construction, spelling, and usage. · Uses appropriate methods of transition and exhibits an awareness of the importance of precise word choice and imagery.	· Demonstrates control of grammar, paragraph structure, punctuation, sentence construction, spelling, and usage. · Uses appropriate methods of transitions including an introduction and a sense of closure.	· Fails to demonstrate control of most aspects of grammar, paragraph structure, punctuation. · Lacks a clear introduction and/or closure.
Organization and Structure of Information	· Includes a clear and insightful thesis statement. . Uses a range of sophisticated strategies to reply to core question and /or thesis statement. .Provides extensive facts and details such as: describing or analyzing the subject, comparing and contrasting, naming and explaining benefits and limitations, demonstrating claims or assertions and providing a scenario to illustrate.	· Includes a clear thesis statement. · Uses a range of appropriate strategies to answer the core question and /or address the thesis statement. · Supplies pertinent facts and details to validate and/or support thesis.	· Fails to include a clear thesis statement. . Does not adequately address the core question and/or thesis statement. · Fails to provide facts and details to support thesis.
Distribution of Information in Many Forms	· Expertly and creatively establishes a means of presenting information by employing a variety of methods, which may include use of technology and/or graphics while also highlighting the primary topic.	· Employs an appropriate mix of text, headings, bulleted lists, graphics, tables, charts, print and electronic media to represent the collected and analyzed information.	· Lacks any attempt at varying the over-all presentation and/or its appearance.

Writing Conventions Rubric

Guidelines for Using Rubric: *Select the box that most describes student performance in each area. Alternatively you can "split the indicators" use the check-boxes before each indicator to evaluate each item individually. Schools must use the criteria in this rubric as the minimum criteria to assess graduation by proficiency exhibitions.*

	Exceeds Standard	**Meets Standard**	**Below Standard**	**Reference Standards**
Writing Conventions: Students apply rules of grammar and mechanics.	The student consistently applies the rules and mechanics of writing: ❑ Standard English usage ❑ Capitalization ❑ Punctuation ❑ Spelling ❑ Makes infrequent errors which do not interfere with meaning	The student applies the rules and mechanics of writing: ❑ Standard English usage ❑ Capitalization ❑ Punctuation ❑ Spelling ❑ Makes occasional errors that do not interfere with meaning.	The student inconsistently applies the rules and mechanics of writing: ❑ Standard English usage ❑ Capitalization ❑ Punctuation ❑ Spelling ❑ Frequent errors that interfere with meaning.	GSE W-10-9
Structures of Language: Students demonstrate command of the structure of sentences, paragraphs and text	The student: ❑ Uses varied sentence length and structure to enhance meaning ❑ Uses sophisticated organizational structures within paragraphs ❑ Consistently applies a format and text structure appropriate to purpose, audience and context	The student: ❑ Uses varied sentence length and structure ❑ Uses organizational structures within paragraphs ❑ Applies a format and text structure appropriate to purpose, audience and context	The student: ❑ Does not vary sentence length and structure ❑ Uses incorrect organizational structures ❑ appropriate to purpose, audience and context.	GSE W-12-1

Reprinted from Graduation by Proficiency Exhibition Writing Conventions Draft 2004

Graduation by Proficiency Exhibition Oral Presentation Rubric

Guidelines for Using Rubric: Select the box that most describes student performance in each area. Alternatively you can "split the indicators" use the check-boxes before each indicator to evaluate each item individually.

	Exceeds Standard	Meets Standard	Below Standard	Reference Standards
Language Use and Delivery: **The student communicates ideas effectively.**	The student: ❑ Effectively uses eye contact ❑ Speaks clearly, effectively and confidently using suitable volume and pace ❑ Fully engages the audience ❑ Dresses appropriately ❑ Selects rich and varied words appropriate for context and audience, and uses correct grammar	The student: ❑ Maintains eye contact [2,3] ❑ Speaks clearly and uses suitable volume and pace[2,4] ❑ Takes steps to engage the audience[2] ❑ Dresses appropriately ❑ Selects words appropriate for context and audience, and uses correct grammar[1,4]	The student: ❑ Uses eye contact ineffectively ❑ Fails to speak clearly and audibly and uses unsuitable pace ❑ Does not engage the audience ❑ Dresses inappropriately ❑ Selects words inappropriate for context and audience; uses incorrect grammar.	OC10 2.1[1] OC10 2.5[2] ELA E3c[3] A2a[4]
Organization and Preparation: **The student exhibits logical organization.**	The student: ❑ Introduces the topic clearly and creatively ❑ Maintains a clear focus on the topic ❑ Effectively includes smooth transitions to connect key points ❑ Ends with a logical, effective, and relevant conclusion ❑ Uses agenda, outline, notes or other memory aids to execute a flowing presentation	The student: ❑ Introduces the topic clearly ❑ Maintains a focus on the topic[2] ❑ Includes transitions between key points[3] ❑ Ends with a coherent conclusion based on evidence[4] ❑ Uses agenda, outline, notes or other memory aids to structure presentation [4]	The student: ❑ Does not clearly introduce the topic ❑ Does not establish or maintain a focus on the topic ❑ Uses ineffective transitions that rarely connect key points ❑ Ends without a conclusion based on evidence ❑ Does not make effective use of notes or other memory aids	OC10-2.1[1] OC10 2.2[2] OC10 2.3[3] ELA E3c[4]
Content: **The student explains the process and findings of the project and resulting learning.**	The student: ❑ Clearly defines the topic or thesis and its significance ❑ Supports the thesis and key findings with an analysis of relevant and accurate evidence ❑ Provides evidence of extensive and valid research with multiple and varied sources ❑ Provides evidence of complex problem solving and learning stretch ❑ Combines and evaluates existing ideas to form new insights	The student: ❑ Clearly defines the topic or thesis[7] ❑ Supports the thesis and key findings with evidence [1] ❑ Presents evidence of valid research with multiple sources[3,6] ❑ Provides evidence of problem solving and learning stretch[4,5] ❑ Combines existing ideas to form new insights[7]	The student: ❑ Does not clearly define the topic or thesis ❑ Does not support thesis with evidence ❑ Provides little or no evidence of valid research ❑ Shows little evidence of problem solving or learning stretch ❑ Shows little evidence of the combination of ideas	OC12-2.3[1] NCEE E2[2] W12-6.5[3] A1c[4] A2a[5] A3a[6] EC3[7]
Media Use: The student uses technology and/or other media to enhance the presentation.	The student: ❑ Selects and uses well-crafted audio/visual supports to communicate desired information. ❑ Uses technology to enhance and deepen audience understanding.	The student: ❑ Selects and uses audio/visual supports to communicate desired information.[1,2] ❑ Uses technology to enhance audience understanding.	The student: ❑ Ineffectively uses audio/visual supports ❑ Uses audio/visual supports that detract from the presentation.	OC10 2.6[1] A2c[2]
Questions and Answers: **The student appropriately and effectively responds to questions.**	The student: ❑ Demonstrates extensive knowledge of the topic by responding confidently, precisely and appropriately to all audience questions and feedback	The student: ❑ Demonstrates knowledge of the topic by responding to questions and feedback accurately and appropriately[1,2]	The student: ❑ Demonstrates incomplete knowledge of the topic by responding to questions and feedback inaccurately and inappropriately.	OC10-2.4[1] A2a[2]

Pilot version of RI Exhibition Oral Presentation Rubric 2004-2005